

DRAWINGS:

Examiner states that the drawings fail to show a sliding rod activation means. A number of components are not shown and the newly amended specification now states which components are not shown. Applicant did not show these components because they are self-explanatory and obvious for any one versed in the art. Therefore the activation means which can be "any one of several available means such as a direct connection to an actuating motor (not shown) or indirect connection by way of a cable (not shown)", cannot be shown in the drawings since it is declared as "not shown" in the specification. As for the attachment means, it is identified and shown in Figs. 1-2 as "(42)" and is provided at the end of the sliding rod (40) so that the activation means (not shown) can be attached to it.

REMARKS – specification

Applicant has noticed that most of the text of the abstract actually referred to that of another invention and was submitted by mistake. The amended abstract refers more appropriately to this instant invention.

drawings

No new drawings are necessary since, no parts need be identified. The motor and cable form no part of the claimed invention since such means are well known in various fields and would be easily implemented for anyone of sufficient knowledge in mechanics to be able to change a muffler and thus be apt at performing such modifications on a motorcycle or any such type of mechanical equipment. In fact, this muffler has been offered for sale for quite some time now and hundreds of users have installed the muffler and its related paraphernalia without any problem.

Claims objections

Claim objections have been taken care of by making claim 4 depended upon claim 1, thus creating a limitation over the claim it depends upon. Claim 5 now depends upon claim 3 and limits the claim it depends upon.

Claims rejections over 103

Hanson : Describes a muffler having three different chambers used to either tune or quiet the exhaust. It does have an outer cylinder and inner resonator having a plurality of holes. These elements are common to many types of mufflers and Hanson discloses particulars to his invention which do not include any means for changing relative positioning of the muffler parts, in other words, it is not a tunable muffler. It is tuned to a specific frequency which will attenuate the sound at a predetermined level. As pointed out by Examiner, Hanson lacks several key features of this instant invention.

House : Does not have a moveable plug to vary the available surface area for exiting the exhaust gases. Although there is some movement of inlet tube 14 as helical spring 19 expands in order to create spaces between convolutions so as to let out exhaust, the movement of the inlet tube 14 depends solely upon the pressure of the exhaust gas which is in relation to the amount of gas received. In other words, the faster the engine runs, the more gas is generated, and therefore the more pressure is generated. The user cannot adjust the movement of the inlet tube 14 independently of engine speed. Moreover, the displacement of the inlet tube 14 has no bearing on sound attenuation. That is, the more gas exhausts, the louder it gets and there is nothing the user can do about it. In this way, House's muffler is just like any other muffler, the faster the engine revs, the louder the noise. The purpose of House's invention is strictly to manufacture a more compact muffler more economically.

Yuen : Its function is for cleaning the inside of the muffler as clearly indicated in claim 1. There is no evidence in the specification of sound attenuation or alteration, nor is it possible with the disclosed design to accomplish such a function.

By contrast, claim 1 of this instant invention clearly states that it is a sound level adjustable muffler to vary the sound level at the exhaust. The fact that there are some elements that are common to many types of muffler is understandable. All mufflers work on the basic principle of having chambers and having holes to allow gas to migrate from one chamber to the next. What is unique in this instant invention is that the size of the chambers can be changed while the engine is running. In fact, while the vehicle is operating, as in riding in the street as it were. Yuen discloses a rod that is used for moving a baffle as a means of scraping the inside of a muffler so as to clean it. This is like sweeping a chimney to clean it. Usually, chimney sweepers don't sweep while there is a fire burning in the chimney and Yuen does not advocate cleaning the muffler while the vehicle is in operation -- that is with the engine running, see abstract : "hold the rod and baffles fixed during normal operation of the silencer."

The aim and purpose of Yuen is so foreign to the aim of this invention that they cannot be compared. Even in combining all the teachings of all the cited prior art, Examiner cannot arrive at the result of this instant invention.

Another analogy applicable to all cited prior art is that it is not because both a traditional grandfather clock and an automatic transmission have gears as common elements that they are the same. Although it is known in the art that various lengths of chambers produce different sound absorption characteristics, no one has used that knowledge and applied it to the make a sound level adjustable muffler before.

Applicant hopes that he has responded to the Office Action in an appropriate manner.

Requests For Constructive Assistance

The undersigned has made a diligent effort to amend the claims of this application so that they define unobvious structure because it produces new and unexpected results. If for any reasons the claims of this application are not believed to be in full condition for allowance, applicant respectfully requests the constructive assistance and suggestions of the Examiner in drafting one or more claims pursuant to MPEP 707.07(j) or in making constructive suggestions pursuant to MPEP 706.03(d) in order that this application can be placed in allowable condition as soon as possible and without the need for further proceedings.

Very Respectfully,



Applicant pro se